

ABSTRACT OF THE DISCLOSURE

An aspect of the present invention provides a nonvolatile memory that includes a memory cell array including a data storage area to store a data, and a data invert flag storage area to store a data invert flag indicating whether or not the data is inverted. The memory cell array outputs selected data and a data invert flag related to the selected data. A state machine determines whether or not the number of memory cells to which a bias voltage is applied is equal to or greater than a predetermined number when writing data into the memory cell array. The state machine instructs a data controller to transfer inverted data and a data invert flag if it is equal to or greater than the predetermined number.